

Amendments to the claims:

The listing of claims will replace all prior versions of the claims in the application

1. - 18. (Canceled)

19. (Currently amended) The plant according to claim 23 ~~17~~, further comprising means for transferring the remaining tail gas from the tail gas treatment unit to the means for injecting gas.

20. - 22. (Canceled).

23. (Currently amended) A plant for providing gas for down-hole injection for pressure support in an oil reservoir for recovery of hydrocarbons and production of oxygenated hydrocarbons or higher hydrocarbons from natural gas, comprising:

an air separation unit for production of an oxygen-rich fraction for supply to processes that require oxygen and a nitrogen-rich fraction for injection;

a reformer for conversion of a mixture of natural gas, water and oxygen or oxygen-enriched air from the air separation unit into a synthesis gas comprising mainly H₂, CO, CO₂ and small amounts of methane in addition to any inert gas;

a synthesis unit for conversion of the synthesis gas for synthesis of higher hydrocarbons comprising one or more once-through Fischer-Tropsch units for synthesis of higher hydrocarbons;

means for injecting gas into the reservoir;

means for transferring nitrogen from the air separation unit to the means for injecting gas; and

means for transferring at least a part of a waste gas from the synthesis unit to the means for injecting gas; and,

a tail gas treatment unit for removing CO by a shift reaction and separation of hydrogen from the remaining tail gas; and The plant according to claim 20, further comprising

means for introducing at least a part of the separated hydrogen from the tail gas treatment unit into a Fischer-Tropsch loop to adjust a H₂/CO ratio to a desired level.

24 - 27. (Canceled).

28. (Currently amended) The plant according to claim 26-32, further comprising means for transferring the remaining tail gas from the tail gas treatment unit to the means for injecting gas.

29 - 31. (Canceled).

32. (Currently amended) A plant for providing gas for down-hole injection for pressure support in an oil reservoir for recovery of hydrocarbons and production of oxygenated hydrocarbons or higher hydrocarbons from natural gas, comprising:

an air compression unit for production of compressed air for supply to processes that require air;

a reformer for conversion of a mixture of natural gas, water and oxygen or oxygen-enriched air from the air separation unit into a synthesis gas comprising mainly N₂, H₂, CO, CO₂ and small amounts of methane;

a synthesis unit for conversion of the synthesis gas for synthesis of higher hydrocarbons comprising one or more once-through Fischer-Tropsch units for synthesis of higher hydrocarbons;

means for injecting gas into the reservoir;

means for transferring nitrogen from the air separation unit to the means for injecting gas;

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means for transferring at least a part of the nitrogen-rich waste gas from the synthesis unit to the means for injecting gas; and,

a tail gas treatment unit for removing CO by a shift reaction and separation of hydrogen from the remaining tail gas; and ~~The plant according to claim 29, further comprising~~

a means for introducing at least a part of the separated hydrogen from the tail gas treatment unit into a Fischer-Tropsch loop to adjust a H₂/CO ratio to a desired level.